Aircraft: TOI DHC-6 N821AR

Flight number: 4

Payload Configuration: WISM New Data Collected: yes Total Flight Time: 0.8 hours Submitted By: Paul Racette

From: GJT To: GJT

Start: 2/06/17 14:25 MST Finish: 2/06/17 15:15 MST

Flight Time: 0.8 hours

Log Number: PI: Tim Durham

Funding Source: Parminder Ghuman - NASA - SMD - ESD ESTO - IIP Program Manager

Purpose of Flight: Science

Comments: WISM test flight around the airport. This time the radiometer was connected to the antenna and the WISM instrument suite flew in its full-flight configuration. At the conclusion of this test flight, the WISM instrument is ready to fly science flights over the Grand Mesa.

Accomplishments

Flew multiple loops around airport passing over the radar calibration target

Instrument	Operated		Instrument Issues/Comments
WISM-Radar	yes	400 GByte	Four of six radar channels recorded data.
WISM-Radiometer	yes	4.3 GByte	Radiometer connected to antenna

Flight Report: Fourth flight for the WISM instrument of this campaign. Flight was conducted around the Grand Junction airport. Kerry Speed and Quenton Bonds flew. Pilots were Thomas Sommerville and Ross Rice. Sky was partly cloudy with scattered clouds. The aircraft flew multiple loops around the airport at an altitude of 5000 ft on a track that placed the projected antenna pattern directly over four, in-line calibration targets located in a field adjacent to the aircraft hanger.